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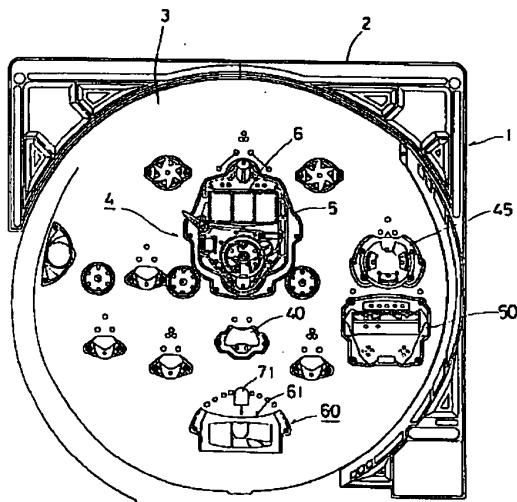
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(54)【発明の名称】 パチンコ機

(57)【要約】

【目的】 変動入賞装置4内の特定入賞孔18に玉が入ると権利が発生し、所定個数を限度としてチャッカーハイ5の特別始動口48に玉が入るたびに、開閉入賞器50が特別入賞口52を所定時間開放する作動を生じる特別作動状態を発生させる構成のパチンコ機にあって、その当たり作動を変化に富んだものとすることを目的とする。

【構成】 開閉作動片14の開閉作動により、玉を受入れる変動入賞装置4に分配器20を装着し、該分配器20により開閉作動片14の所定時間の開放作動により玉入口12から流入する複数の玉のうち、いずれか一個の玉のみを特定入賞孔18へ導き、他の玉を普通入賞孔17に導き、さらにはこの特定入賞孔18に入った玉を遊戯盤3上に設けた振分け装置60により、有利玉と、不利玉とに振り分け、有利玉に振り分けられた時には、不利玉となった時に比して、遊技者にとって利益ある作動を生じさせるようにした。



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【特許請求の範囲】

【請求項1】入賞ケース内を囲繞する周壁に玉入口を形成し、該玉入口を開閉制御する開閉作動片を備え、かつ内部に特定入賞孔を備えた変動入賞装置と、特別始動口を備えたチャッカーと、特別入賞口を備えた開閉入賞器とを遊技盤面に備え、前記変動入賞装置内の特定入賞孔に玉が入ると権利が発生し、所定個数を限度としてチャッカーの特別始動口に玉が入るたびに、開閉入賞器が特別入賞口を所定時間開放する作動を生じる特別作動状態を発生させる構成のパチンコ機において、前記変動入賞装置を、

入賞ケース内に玉流路の下方に作動空隙を形成して、該作動空隙内に、普通入賞孔と、特定入賞孔とを夫々形成し、さらに開閉作動片の所定時間の開放作動により玉入口から流入する複数の玉のうち、いずれか一個の玉のみを特定入賞孔へ導き、他の玉を普通入賞孔に導く分配器を配設して構成すると共に、前記変動入賞装置の特定入賞孔に連通させて、該玉入口から送給された玉を有利玉と不利玉とに振分ける振分け装置を遊技盤面に配設し、

さらに有利玉の発生により、不利玉の発生に比して有利な特別作動状態を発生させる制御指令手段を備えたことを特徴とするパチンコ機。

【請求項2】前記変動入賞装置を、

入賞ケース内に開閉作動片により開放制御される玉流路を形成し、かつ玉流路の下方に作動空隙を形成して、該玉流路と作動空隙とを玉流入口により連通し、主出入口と誘導口と副出入口とを夫々ほぼ 120° の角度配置で周面に形成して、主出入口と副出入口を滯留溝で連通し、さらに誘導口は玉一個分の収納を可能としてなる円盤状回転分配器を、前記作動空隙内に軸支し、その支軸を入賞ケースの背部に装着した駆動制御モータに連係して一方へ回転制御し、主出入口、誘導口、副出入口を、中心から 60° 偏位した位置で前記玉流入口と順次合致させると共に、前記作動空隙には、回転分配器の回転に伴って前記主出入口及び副出入口と連通する普通入賞孔と、前記誘導口のみと連通する特定入賞孔とを夫々形成して構成すると共に、

前記開閉作動片の開放時に、前記回転分配器の主出入口を前記玉流入口と合致させ、前記玉検知装置による所定個数の流入検知に伴って、回転分配器を駆動し、玉流入口で待機していた玉を誘導口に収容し、さらに回転して、誘導口の玉を特定入賞孔へ流出させ、滯留溝の玉を他方の玉出入口から普通入賞孔へ流出する駆動制御手段を備えたことを特徴とする請求項1記載のパチンコ機。

【請求項3】有利玉の発生により、特別作動状態で、前記開閉入賞器の特別入賞口を開放させ得るチャッカーの有効限度個数を、不利玉の発生に比して多くする制御指令手段を備えたことを特徴とする請求項1記載のパチンコ機。

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【請求項4】有利玉の発生により、特別作動状態で、前記チャッカーの特別始動口に玉が入って、開閉入賞器が開放作動する時間を、不利玉の発生に比して長くするようにした制御指令手段を備えたことを特徴とする請求項1記載のパチンコ機。

【請求項5】予め定められた種々の図柄を変動表示する複数の図柄表示部によって構成され、球検知装置を備えた始動ゲートを遊技球が通過すると、球検知装置からの球検知信号に基づいて各図柄表示部が変動を開始し、停止して種々の組合わせの図柄を表示する図柄組合せ表示装置を備え、

前記図柄組合せ表示装置の各停止図柄が所定の組合せである「大当たり」表示となると、前記変動入賞装置の開閉作動片を開放作動させると共に、振分け装置に流入した玉が有利玉となったときに、不利玉の発生に比して図柄表示部の当り確率を、所定期間まで高確率に維持する制御指令手段とを具備したことを特徴とする請求項1記載のパチンコ機。

【請求項6】前記振分け装置によって振り分けられた不利玉と有利玉の発生を、異なった効果音で報知する音処理装置を備えたことを特徴とする請求項1乃至4記載のパチンコ機。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は、変動入賞装置を備えたパチンコ機に関する。

【0002】

【従来の技術】入賞ケース内に形成した作動空隙を囲繞する周壁に玉入口を形成し、該玉入口を開閉制御する開閉作動片を備え、かつ内部に特定入賞孔を備えた変動入賞装置と、特別始動口を備えたチャッカーと、特別入賞口を備えた開閉入賞器とを備え、前記変動入賞装置内の特定入賞孔に玉が入ると権利が発生し、所定個数を限度としてチャッckerの特別始動口に玉が入るたびに、開閉入賞器が特別入賞口を所定時間開放する作動を生じる特別作動状態を発生させる構成のパチンコ機は種々提案されている。

【0003】

【発明が解決しようとする課題】ところで、図柄組合せ表示装置により所定の組み合わせ図柄となると、大当たりとし、所定の利益を供与する構成にあっては、大当たりとなれば利益が確実に供されるため、かえって遊技の面白みに欠けるくらいがある。そこで、大当たり状態で、所定の変動入賞装置を駆動させ、一定の入賞条件を満たすと、大当たりの権利を発生させるようにして、遊技の複雑化を生じさせた構成のものが提案されている。一方、図柄組合せ表示装置を用いない構成にあっても、所定の利得を発生させるための変動入賞装置が種々提案されている。本発明は、この種の変動入賞装置を備えたものにおいて、その当たり作動を変化に富んだものとすることを

目的とするものである。

【0004】

【課題を解決するための手段】本発明は、前記変動入賞装置を、入賞ケース内に玉流路の下方に作動空隙を形成して、該作動空隙内に、普通入賞孔と、特定入賞孔とを夫々形成し、さらに開閉作動片の所定時間の開放作動により玉入口から流入する複数の玉のうち、いずれか一個の玉のみを特定入賞孔へ導き、他の玉を普通入賞孔に導く分配器を配設して構成すると共に、前記変動入賞装置の特定入賞孔に連通させて、該玉入口から送給された玉を有利玉と不利玉とに振分ける振分け装置と、有利玉の発生により、不利玉の発生に比して有利な特別作動状態を発生させる制御指令手段とを備えたものである。

【0005】この制御指令手段としては、有利玉の発生により、特別作動状態で、前記開閉入賞器の特別入賞口を開放させ得るチャッカーの有効限度個数を、不利玉の発生に比して多くしたもののが提案され得る。

【0006】また、有利玉の発生により、特別作動状態で、前記チャッカーの特別始動口に玉が入って、開閉入賞器が開放作動する時間を、不利玉の発生に比して長くしたもののが提案され得る。

【0007】さらには、始動ゲートへの玉流入により変動して、予め定められた種々の図柄を変動表示する複数の図柄表示部を備え、前記図柄表示部が所定の図柄となると、開閉作動片により前記玉入口を開放制御するようにした変動入賞装置を用いたものにおいて、前記変動入賞装置の特定入賞孔に連通させて、該玉入口から送給された玉を有利玉と不利玉とに振分ける振分け装置と、振分け装置に流入した玉が有利玉となったときに、不利玉の発生に比して図柄表示部の当り確率を、所定期間まで高確率に維持する制御指令手段とを具備したことを特徴とするものである。

【0008】上述した各手段にあって、前記振分け装置によって振り分けられた不利玉と有利玉の発生を、異なった効果音で報知する音処理装置を備えるようにすることができます。

【0009】

【作用】開閉作動片が開放位置に変換され、玉入口から複数個の玉が流入し、そのうちの一つが分配器により特定入賞孔に導かれると特別入賞状態が発生する。そして、玉は振分け装置に流入し、これが有利玉となると、不利玉となった場合に比して、パチンコ機は遊技者にとって有利な作動を生ずる。

【0010】

【実施例】添付図面について本発明の一実施例を説明する。図1は、パチンコ機1の正面図であって、その機枠2の図示しない下部には玉受皿と、玉発射用の回転式ハンドル等が設けられる。遊技盤3の盤面中央には、図2で拡大して示すように変動入賞装置4が配設される。

【0011】変動入賞装置4は、図2～4で明瞭に示す

ように、入賞ケース5を基体とするものであって、その上半分には、周壁7で囲まれて作動窓孔6が形成され、該作動窓孔6の下部に図中右側へ傾斜する玉流路8が形成されている。

【0012】一方、前記作動窓孔6の玉流路8上の主表面には、組合せ表示装置9を構成する三個の7セグメント指示器からなる図柄表示部10a, 10b, 10cが並設されている。前記図柄表示部10a, 10b, 10cは、LED又は液晶によって構成され、「0」～「9」等、数字及びアルファベットからなる7セグメント指示器で表現可能な図柄が表示される。また作動窓孔6の上縁部には、4個のバイロットランプからなる待機記録ランプ列11が設けられている。

【0013】周壁7の左壁には玉入口12が形成されており、該玉入口12の下端部に回転軸13に支持され、起立状態で玉入口12を遮蔽し、横臥状態で玉入口12を開放する開閉作動片14が枢支されている。この開閉作動片14は、装着フレーム30に保持されたソレノイド33によって構成される開閉駆動装置により、支軸13を回転制御され、開放位置と、閉鎖位置とに変換される。

【0014】前記表示窓孔6の下部には、ほぼ円形の作動空隙16が形成されている。この作動空隙16は図5～7で明らかなように図中右側で中心からほぼ60°偏位した位置で玉流入口15を介して玉流路8と連通している。この玉流入口15には、玉検知装置15aが配設され、玉の通過を検知し得るようにしている。

【0015】また前記作動空隙16の直下位置には普通入賞孔17が形成され、さらには中心から左側へ60°偏位した位置の前壁面19には特定入賞孔18が形成されている。この特定入賞孔18は玉検知装置を備える玉通路(図示せず)と連通している。さらには、前記普通入賞孔17、特定入賞孔18に流下した玉は入賞玉となって、公知機構により所定数の景品玉を排出すると共に、前記特定入賞孔18に玉が流下することにより、玉検知装置によって検知され、特別作動状態となって、遊戯者に所要の利得を受ける権利を発生させることとなる。

【0016】この作動空隙16には、円盤状の回転分配器20が前壁面19を貫通する支軸21にその中心を支持されて配設される。前記回転分配器20は、背面壁22に肉厚部を突成することにより、その周面に主出入口23と誘導口26と副出入口24とを夫々ほぼ120°の角度配置で周面に形成して、主出入口23と副出入口24を視認可能のく形状滞留溝25で連通している。さらに誘導口26は玉一個分の収納を可能としている。また、誘導口26の背部は背面壁22が除去されている。さらにまた滞留溝25及び誘導口26は前方に開放されている。そして、回転分配器20は、前記入賞ケース5の作動空隙16を覆う前面板5aの透孔部5bにより視認可能となっており、このため、後述する滞留溝25,

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誘導口26に流入する玉の動きを遊技者は確認することができます。

【0017】前記支軸21には、入賞ケース5の背部に装着フレーム30により支持されたステップモータ等からなる駆動制御モータ31の駆動軸を歯車列32を通して連係し、前記回転分配器20を反時計方向へ回転制御し得るようにしている。また、前記閉闇作動片14は、同じく装着フレーム30に保持されたソレノイド33による駆動制御によって、開放位置と、閉鎖位置とに変換される。その他変動入賞装置4の上部には入賞口35が配設される。

【0018】また前記変動入賞装置4の下方には、光電スイッチ、リミットスイッチ等により構成される球検知装置(図示せず)を備える始動ゲート40が設けられている。この始動ゲート40に遊技球が通過して該球検知装置による球検知信号が発生すると、組合せ表示装置9を駆動すると共に、通常の入賞口と同様に、その遊技球の通過に伴って所定数の景品球を発生する。

【0019】変動入賞装置4の右方には、図8で示すように回転体46に玉一個分の保留を可能とする捕捉孔47が周部に形成された回転体46を内蔵する回転チャッカーリング45が配設される。この回転チャッカーリング45内には特別始動口48が配設され、前記捕捉孔46に入った玉を回転体46の回転に伴って、特別始動口48に供給する。

【0020】そのさらに下方には、図9で示すようにソレノイド51により開閉板53を作動させて開閉駆動制御される特別入賞口52を備えた開閉入賞器50が配設される。

【0021】そして特定入賞孔19に玉が流下することにより生ずる特別作動状態のときに、回転チャッカーバー45の捕捉孔47に玉が流入し、回転チャッカーバー45の回転に伴って、玉が特別始動口48に供給されると、特別入賞口52の開閉板53が約10秒開放する。尚、この特別入賞口52に約10個の玉が流入したときには、開放作動中であってもその開放動作が終了する。また、回転チャッカーバー45へ有効限度個数の範囲（通常16個）で遊技球が入賞するたびに、特別入賞口52は開放され、而して後に、特別作動状態が終了する。

【0022】前記始動ゲート40のさらに下方位置には、図10～13で詳細に示す振分け装置60が配設されている。

〔0023〕かかる振分け装置60の構成につき説明する。振分け装置60は上面が上方に開口された受口61を備える。この受口61は案内円溝62を備え、中央に透孔63が形成されている。そして、前記案内円溝62の下方には、同心状に同じく案内円溝64を備えた底板が設けられている。前記案内円溝64の後側部には、該案内円溝64の接線方向に玉を案内する放流路66が形成され、前記透孔63は案内円溝62の下面に形成され

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た受樋65により、放流路66と上下で連通している。また前記案内円溝64には、中央部前縁の有利孔67と後方左右の不利孔68、68とが形成されており、さらに、有利孔67は玉検知スイッチS1（図16参照）が具備された有利樋69に、不利孔68、68は玉検知スイッチS2（図16参照）が具備された不利樋70、70に連通している。

【0024】前記振分け装置60上には排出口71が配設されている。この排出口71は、前記特定入賞孔18と流通路72と連通しているものであり、従って特定入賞孔18に入った玉は振分け装置60上に流出することとなる。

【0025】かかる構成にあって、前記受口61の前縁部が遊技盤3から突出し、ここが実質的な受口61となる。この受口61は変動入賞装置4との間に打たれた釘列73により盤面で周囲から分離され、前記変動入賞装置4の落下孔25とのみ連通している。そして受口61に入った玉は案内円溝62の透孔63から受樋65を経て、該放流路66上に落下する。そして放流路66の案

【0026】次に変動入賞装置4の作動について説明する。遊技盤3に遊技球が打ち出されて、始動ゲート40を通過すると、図10で示す中央制御装置CPUに接続

30 された記憶装置ROMに格納された乱数表の内いずれかを選出し、その選出値に対応して、当たり、またははずれを決定する。そして、景品球の供給と共に図柄表示駆動回路を介して前記組合せ表示装置9を駆動して、図柄表示部10a, 10b, 10cを変動開始し、約5秒程度経過すると、当たり、はずれの判定にもとづき、乱数表から図柄表示部10a, 10b, 10cの図柄を決定し、順次停止する。そして、図柄表示部10a, 10b, 10cの図柄が同一図柄、または図柄表示部10a, 10bが同一図柄で、図柄表示部10cが「当」図

40 柄の場合には、「大当たり」となり、図14で示す音声処理装置によりスピーカーが鳴音を発すると共に、ソレノイド33が駆動して、開閉作動片14が傾斜状態（開放状態）となり、次のような所定の利得を可能とする作動に移行する。

【0027】尚、前記始動ゲート40に遊技球が連続的

【2.2.2】また、この問題作動片1.1は他の問題

【0028】すなわちこの開閉作動片14は約5.9秒開放し、この開放中に、開口12から打玉が数個流入する。一方、回転分配器20は、開閉作動片14の閉鎖状

態では、反時計方向に低速回転しているが、大当たりに伴って高速回転し、図3及び図5で示すように主出入口23が玉流路8の右端に形成した玉流入口15と一致し、かつ誘導口26がほぼ直下方向に位置した状態で停止する。このため、開口12から入った玉は、玉流入口15から玉が主出入口23に流入する。このとき、滯留溝25を介して主出入口23と連通する副出入口24は、中心からほぼ60°偏位した左位置にあり、滯留溝25はく字状となっており、かつ小突起27により、その慣性流出を阻止されているため、二個の玉x₁, x₂のみが滯留溝25内に滞留が可能となり、残りは玉流入口15内又は、玉流路8上に残すこととなる。

【0029】一方、前記玉流入口15に配設された玉検知装置15aによって、三個目の玉x₃が検知されると、前記回転分配器20は、反時計方向へ回転する。そして図6で示すように誘導口26が玉流入口15と一致すると、玉x₃だけが誘導口26に流入する。このとき副出入口24は普通入賞孔17に一致し、このため、滯留溝25内の二個の玉x₁, x₂は、該普通入賞孔17側へ排出される。そして、さらに回転分配器20は回転し、図4及び図7で示すように誘導口26が特定入賞孔18に一致すると、その玉は特定入賞孔18へ排出される。またこの位置では、副出入口24が玉流入口15に一致し、かつ主出入口23は普通入賞孔17と一致しているから、四個以上の玉x₄～は、連続的に滯留溝25内を経由して普通入賞孔17側へ落下し、排出されることとなる。

【0030】かかる各作動は、中央制御装置CPUで構成される駆動制御手段により制御される。

【0031】そして、前記特定入賞孔18へ玉x₄が流下すると、その流通路内に配設した玉検知装置により検知され、特別作動状態となって、大当たりの権利が発生する。すなわち、組合せ表示装置9が所定の大当たりとなる組み合わせとなつても、開口12から三個以上の玉が流入しないかぎり、有効とはならない。而して、大当たりを発生させるための入賞条件が付加されることとなる。

【0032】特定入賞孔18に入った玉は、流通路72を経由して排出口71から振分け装置60の受口61上に流下する。そして上述した過程を経て、有利孔67、不利孔68, 68のいずれかに流入し、有利玉と不利玉とに振り分けられる。尚、有利孔67、不利孔68, 68のいずれに入つても、後述するようにその利益の内容には差異があるが、いずれも特別作動状態となって、所定の利益を受けることができる。すなわち、特定入賞孔18に玉が入ることにより特別作動状態となる。

【0033】ここで、有利孔67に入ったのか、または不利孔68, 68に入ったのかを明確に報知するよう、図14に示すように中央制御装置CPUにより制御される音処理装置によって、各孔67, 68内での玉検知スイッチS1, S2による玉検知に基づいてそれぞれ

異なる効果音をスピーカから発生させるようにする。これにより、遊技者は容易に状態判断をすることができる。

【0034】上述したように玉が不利孔68, 68に入った場合と、有利孔67に入った場合とでは、特別作動状態の内容が異なる。この差異は、特別入賞口52を開放させ得る特別始動口48への玉の入る限度個数（以下、有効限度個数という）を変化させることにより行われ得る。

【0035】詳細に説明すれば、有効限度個数を有利孔67に入つて有効玉に振り分けられたときには、16個とし、不利孔68, 68に入つて無効玉に振り分けられたときには、2個とする。そして不利孔68, 68または有利孔67に入った場合には、この特別作動状態の間に、回転チャッカ45の捕捉孔47に玉が流入し、回転分配器46の回転に伴つて、玉が特別始動口48に供給されると、特別入賞口52の開閉板53が約10秒開放する。そしてこの特別入賞口52に約10個の玉が流入したときには、開放作動中であつても、その開放動作が終了する。そして有効限度個数の消化にともない、特別作動状態が終了する。

【0036】而して、遊技者は、大当たりに伴う利得の供与を、有利玉の発生により、不利玉の発生に比して有利に受けこととなる。

【0037】かかる利益の差異を発生させる手段として、前記開閉板53の開放時間に差異を生じさせる手段も採用され得る。即ち、有効玉に基づく特別作動状態の場合には、前記開閉板53の開放時間を約10秒とし、無効玉の発生に基づく特別作動状態の場合には、5秒程度とする。

【0038】次に、前記組合せ表示装置9により制御される図柄表示部10a, 10b, 10cの当たり確率を、特別作動終了後に変化させて、利益に差異を生じさせる手段も適用され得る。

【0039】即ち、有利孔67に入つて有効玉が生じた場合には、特別作動が終了した次の図柄表示部10a, 10b, 10cの当たり確率を通常よりも10倍向上させるようする。一方、不利孔68, 68に入つて無効玉が発生した場合にあっては、特別作動終了後も、通常の当たり確率とする。一方、振分け装置で、不利孔68に入ると、第二の特別入賞状態となる。

【0040】この構成を更に詳しく説明する。中央制御装置CPUに接続された記憶装置ROMには、「0」～「275」までの276コマを循環する乱数値が格納され、前記40への球通過にともない、そのいずれかを選出す。そしてこの値が例えば「0」の場合のみを当りとし、それ以外をハズレと判定し、始動ゲート40への球通過直後、又は通過記憶された場合には、その記憶数が消化されると組合せ表示装置9の変動が開始され、前記判定結果に基づいて、当たり又ははずれの図柄を選定

し、組合わせ表示装置9を駆動停止して図柄表示部10a, 10b, 10cに表示する。

【0041】したがって、通常は、当たり確率は1/276である。しかるに前記有利孔67に玉が入って玉検知スイッチS2がオン作動すると、上述したように、特別始動口48に有効限度個数が入って、特別作動状態が終了したら、次回の当たりが発生するまで、乱数値のうち、例えば「0」～「9」までを当たりとして、当たり確率を10倍とする。この場合に、次回の当たり作動にあっては、有利孔67に玉が入っても、有利な作動は生じない。尚、連続的に、高確率としても良く、この場合には大当たり中に、不利孔68, 68に玉が入らない限り、当たり確率は高率状態が維持されることとなる。

【0042】更には、不利孔68, 68に入った場合も、通常の状態に比して、高確率としても良い。例えば、有利孔67の玉流入に基づき確率を通常よりも10倍に上昇させ、不利孔68, 68の玉流入に基づき確率を通常よりも5倍に上昇させるようにする。この場合にも、有効玉と、無効玉で、利益に大きな差異を生じさせ得る。尚、この場合には、次回の大当たりで、通常確率に復帰することとなる。

【0043】上述の一連の作動は図14で示す中央制御装置CPU等からなる制御指令手段により容易に実行され得る。この中央制御装置CPUは、上述したように変動入賞装置4の駆動制御手段も兼ねている。

【0044】

【発明の効果】本発明は、上述したように、開閉作動片14の開閉作動により、玉を受入れる変動入賞装置4に分配器20を装着し、該分配器20により開閉作動片14の所定時間の開放作動により玉入口12から流入する複数の玉のうち、いずれか一個の玉のみを特定入賞孔18へ導き、他の玉を普通入賞孔17に導き、さらにはこの特定入賞孔18に入った玉を遊戯盤3上に設けた振分け装置60により、有利玉と、不利玉とに振り分け、有利玉に振り分けられた時には、不利玉となつた時に比して、遊技者にとって利益ある作動を生じさせるようにしたものであるから、振分け装置60での玉の行方に、スリリングな期待感を抱くこととなり、かつ遊戯盤面の作動を変化に富んだものとすることで、パチンコ遊技の興奮を一層高め得る優れた効果がある。

【図面の簡単な説明】

【図1】本発明のパチンコ機1の正面図である。

【図2】変動入賞装置4の正面図である。

【図3】変動入賞装置4の斜視図である。

【図4】変動入賞装置4の一部を省略した他の態様を示す斜視図である。

【図5】回転分配器20の作動を示す横断正面図である。

【図6】回転分配器20の他の作動を示す横断正面図である。

10 【図7】回転分配器20のさらに他の作動を示す横断正面図である。

【図8】回転チャッカ45の斜視図である。

【図9】大入賞口47の斜視図である。

【図10】振分け装置60を示す縦断正面図である。

【図11】図10A-A断面図である。

【図12】振分け装置60の示す平面図である。

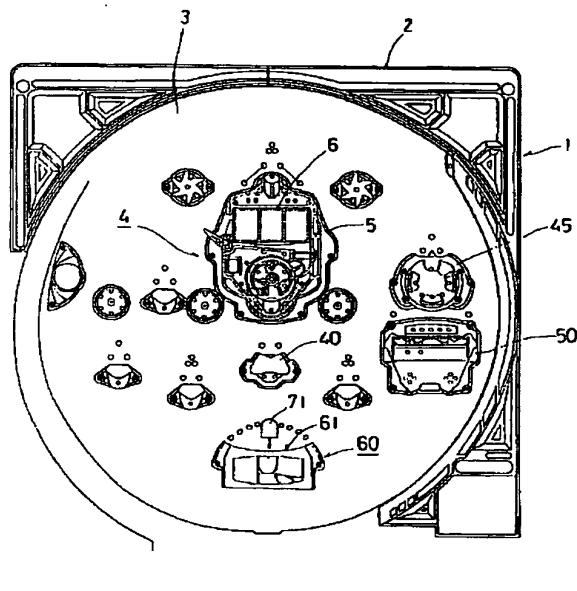
【図13】図10B-B断面図である。

【図14】制御指令手段を示すブロック図である。

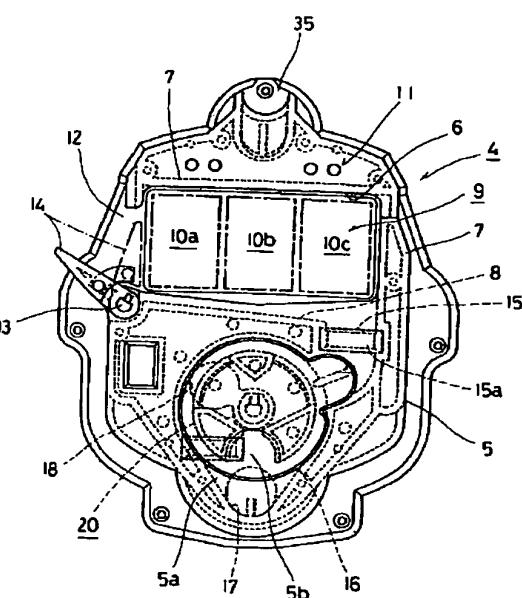
【符号の説明】

- | | |
|----|---|
| 20 | 1 パチンコ機
4 変動入賞装置
5 入賞ケース
6 作動窓孔
9 組合わせ表示装置
10a, 10b, 10c 図柄表示部
12 玉入口
14 開閉作動片
17 普通入賞孔
18 特定入賞孔
30 20 回転分配器
21 支軸
40 始動ゲート
45 回転チャッカ
46 回転分配器
48 特別始動口
50 開閉入賞器
52 特別入賞口
60 振分け装置
67, 68 不利孔
40 68 有利孔 |
|----|---|

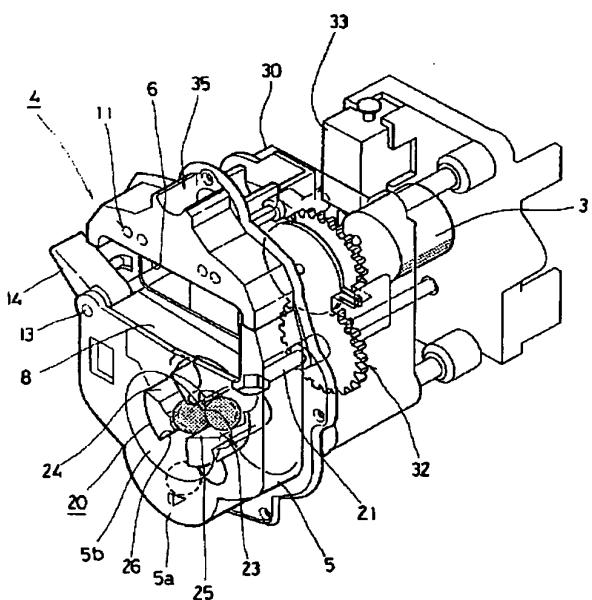
【図1】



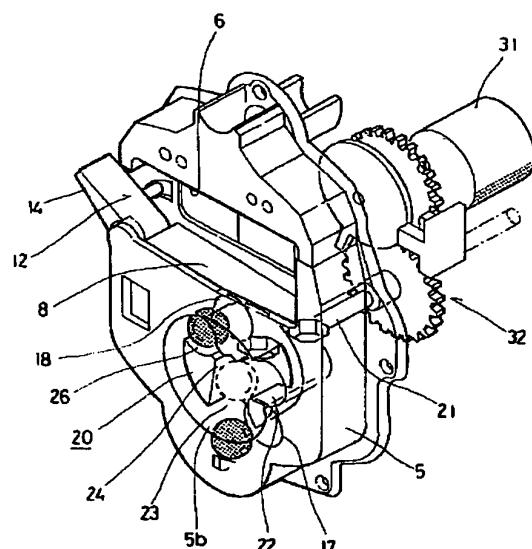
【図2】



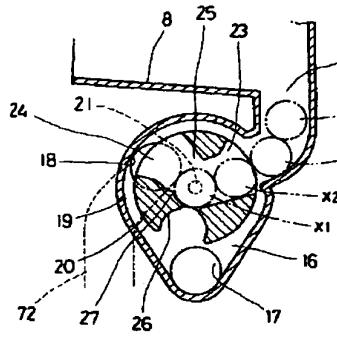
【図3】



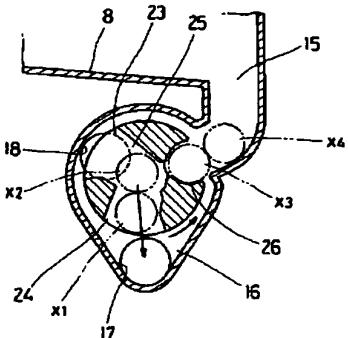
【図4】



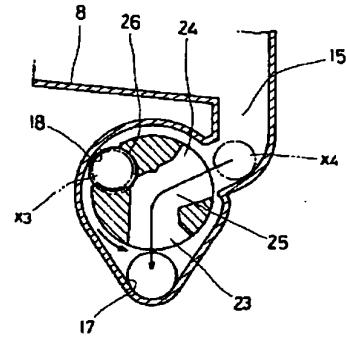
【図5】



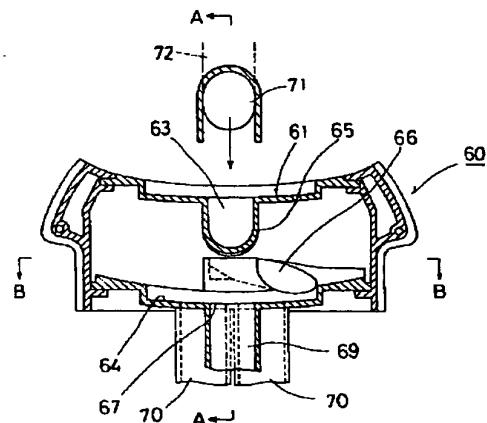
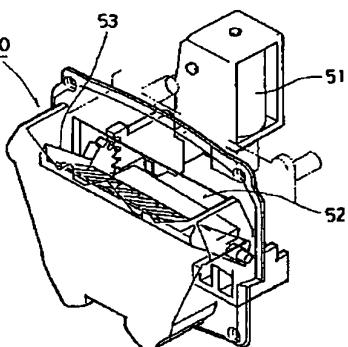
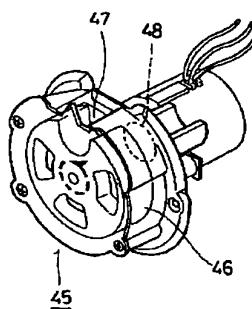
【図6】



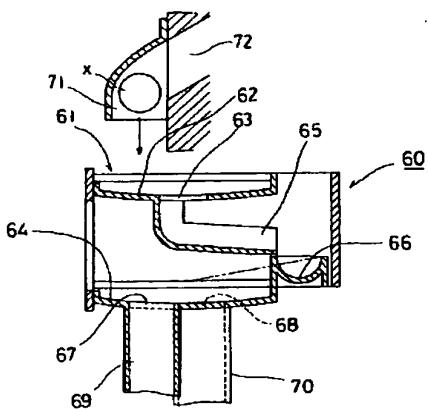
【図7】



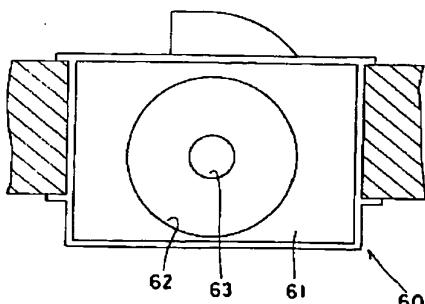
【図8】



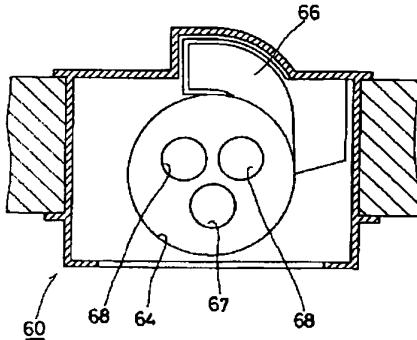
【図11】



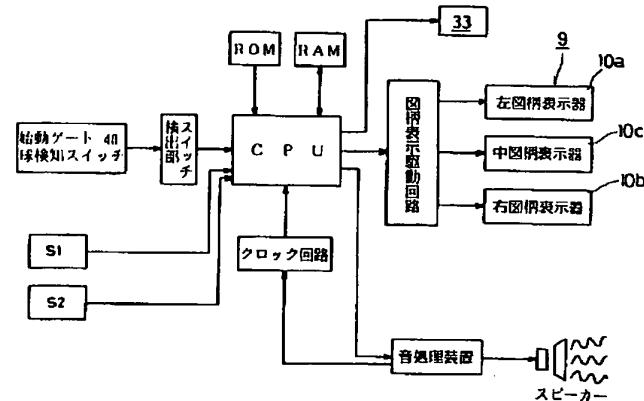
【図12】



【図13】



【図14】



【手続補正書】

【提出日】平成5年2月26日

【手続補正1】

【補正対象書類名】明細書

【補正対象項目名】0023

【補正方法】変更

【補正内容】

【0023】かかる振分け装置60の構成につき説明する。振分け装置60は上面が上方に開口された受口61を備える。この受口61は案内円溝62を備え、中央に透孔63が形成されている。そして、前記案内円溝62の下方には、同心状に同じく案内円溝64を備えた底板

が設けられている。前記案内円溝64の後側部には、該案内円溝64の接線方向に玉を案内する放流路66が形成され、前記透孔63は案内円溝62の下面に形成された受槽65により、放流路66と上下で連通している。また前記案内円溝64には、中央部前縁の有利孔67と後方左右の不利孔68, 69とが形成されており、さらに、有利孔67は玉検知スイッチS1 (図14参照) が具備された有利槽69に、不利孔68, 69は玉検知スイッチS2 (図14参照) が具備された不利槽70, 71に連通している。

【公報種別】特許法第17条の2の規定による補正の掲載

【部門区分】第1部門第2区分

【発行日】平成9年(1997)1月14日

【公開番号】特開平7-611

【公開日】平成7年(1995)1月6日

【年通号数】公開特許公報7-7

【出願番号】特願平4-350864

【国際特許分類第6版】

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312

314

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A63F 7/02 317 7017-2B

312 Z 7017-2B

314 7017-2B

315 A 7017-2B

【手続補正書】

【提出日】平成8年1月16日

【手続補正1】

【補正対象書類名】明細書

【補正対象項目名】請求項6

【補正方法】変更

【補正内容】

【請求項6】前記振分け装置によって振り分けられた不利玉と有利玉の発生を、異なった効果音で報知する音処理装置を備えたことを特徴とする請求項1乃至5記載のパチンコ機。

PATENT ABSTRACTS OF JAPAN

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A63F 7/02

A63F 7/02

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(21)Application number : **04-350864**

(71)Applicant : **MARUHON IND CO LTD
TECHNICAL ADVANCE:KK**

(22)Date of filing : **04.12.1992**

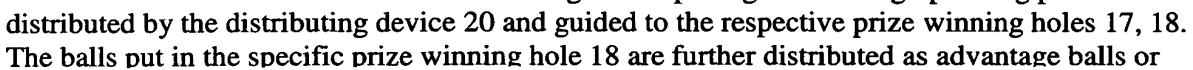
(72)Inventor : **KISHI ISAO
YOSHIDA NOBUHARU**

(54) PACHINKO GAME MACHINE

(57)Abstract:

PURPOSE: To increase the interest of a pachinko game by installing a distributor on a variable prize winning device, guiding one of plural balls which flow in through a ball inlet to a specified prize winning hole and distributing this ball as one of advantage balls or disadvantageous balls by means of a distributing device.

CONSTITUTION: A variable prize winning device 4 is disposed in the center of the board surface of the game board of a pachinko game machine, and a distributing device is disposed below the device 4. The variable prize winning device 4 is provided with a combination display device 9, and an opening and closing operating piece 14 is pivoted on a ball inlet 12 formed on the left wall of the peripheral wall 7. A disc-like rotary distributing device 20 is rotatably provided in a display window hole 6, an ordinary prize winning hole 17 is formed right under the device 20, and a specific prize winning hole 18 is formed on the front wall biased to one side. Balls received by opening and closing of an opening and closing operating piece 14 are distributed by the distributing device 20 and guided to the respective prize winning holes 17, 18. The balls put in the specific prize winning hole 18 are further distributed as advantage balls or



disadvantage balls by a distributing device.

LEGAL STATUS

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[Date of final disposal for application]
[Patent number] 2684304
[Date of registration] 15.08.1997
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

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- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS**[Claim(s)]**

[Claim 1] the piece of an opening-and-closing operation which forms a ball entrance in the peripheral wall which surrounds the inside of a winning-a-prize case, and carries out opening-and-closing control of this ball entrance -- having -- and the interior -- specific winning a prize -- change winning-a-prize equipment equipped with the hole It is a starting mouth specially. Are the pachinko machine equipped with the above and an operation opening is formed for the aforementioned change winning-a-prize equipment down the ball passage in a winning-a-prize case. the inside of this operation opening -- usually -- winning a prize -- a hole and specific winning a prize -- a hole being formed, respectively and among two or more balls which flow from a ball entrance further by the open operation of the predetermined time of the piece of an opening-and-closing operation any one ball -- specific winning a prize -- a hole -- leading -- other balls -- usually -- winning a prize, while arranging and constituting the distributor led to a hole specific winning a prize of the aforementioned change winning-a-prize equipment -- a hole is made open for free passage, the

symmetry equipment which distributes the ball fed from this ball entrance to an advantageous ball and a disadvantageous ball is arranged in the game face of a board, and it is characterized by having further a control-command means to generate an advantageous special operating state as compared with generating of a disadvantageous ball, by generating of an advantageous ball

[Claim 2] The pachinko machine according to claim 1 characterized by providing the following Form the ball passage as for which open control is carried out into a winning-a-prize case in the aforementioned change winning-a-prize equipment by the piece of an opening-and-closing operation, and an operation opening is formed down the ball passage. Open this ball passage and an operation opening for free passage by the ball input, and the main entrance, a guidance mouth, and a subentrance are formed in a peripheral surface by angle arrangement of about 120 **, respectively. Open the main entrance and a subentrance for free passage in a stay slot, and a guidance mouth further the disk-like rotation distributor which becomes considering the receipt for a ball piece as possible While making it agree with the aforementioned ball input one by one in the position which supported to revolve in the aforementioned operation opening, coordinated with the drive control motor which equipped with the pivot behind the winning-a-prize case, carried out the roll control to ** on the other hand, and biased the main entrance, a guidance mouth, and 60 degrees of subentrances from the center open for free passage [with rotation of a rotation distributor / with the aforementioned main entrance and a subentrance] to the aforementioned operation opening -- usually -- winning a prize -- a hole the aforementioned guidance mouth and specific winning a prize open for free passage, while forming a hole, respectively and constituting it At the time of opening of the aforementioned piece of an opening-and-closing operation, make the main entrance of the aforementioned rotation distributor agree with the aforementioned ball input, drive a rotation distributor with inflow detection of the predetermined number by the aforementioned ball detection equipment, hold the ball which was standing by by the ball input in a guidance mouth, and it rotates further. the ball of a guidance mouth -- specific winning a prize -- it flows into a hole -- making -- the ball of a stay slot -- from the ball-feeding entrance of another side -- usually -- winning a prize -- the drive control means which flow into a hole

[Claim 3] The pachinko machine according to claim 1 characterized by having specially the control-command means which makes [many] the effective limit number of CHAKKA of the aforementioned opening-and-closing winning-a-prize machine which may make a winning-a-prize mouth open wide specially by the operating state as compared with generating of a disadvantageous ball by generating of an advantageous ball.

[Claim 4] The pachinko machine according to claim 1 characterized by having specially the control-command means which was made to lengthen time of aforementioned CHAKKA for a ball to go into a starting mouth specially and for an opening-and-closing winning-a-prize machine carry out an open operation by the operating state as compared with generating of a disadvantageous ball by generating of an advantageous ball.

[Claim 5] If a game sphere passes through the starting gate which was constituted by two or more pattern displays which indicate the various patterns defined beforehand by change, and was equipped with sphere detection equipment Based on the sphere detection signal from sphere detection equipment, each pattern display starts change. If it has the pattern combination display which stops and displays the pattern of various combination and each halt pattern of the aforementioned pattern combination display serves as "great success" display which is predetermined combination, while carrying out the open operation of the piece of an opening-and-closing operation of the aforementioned change winning-a-prize equipment The pachinko machine according to claim 1 characterized by providing a control-command means to maintain the hit probability of a pattern display to high probability till predetermined time as compared with

generating of a disadvantageous ball when the ball which flowed into symmetry equipment turns into an effective ball.

[Claim 6] The pachinko machine according to claim 1 to 4 characterized by having the sound processor which reports generating of the disadvantageous ball and advantageous ball which were able to be distributed with the aforementioned symmetry equipment by different sound effect.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] this invention relates to the pachinko machine equipped with change winning-a-prize equipment.

[0002]

[Description of the Prior Art] the piece of an opening-and-closing operation which forms a ball entrance in the peripheral wall which surrounds the operation opening formed in the winning-a-prize case, and carries out opening-and-closing control of this ball entrance -- having -- and the interior -- specific winning a prize -- with change winning-a-prize equipment equipped with the hole It has CHAKKA specially equipped with the starting mouth, and the opening-and-closing winning-a-prize machine specially equipped with the winning-a-prize mouth. specific winning a prize in the aforementioned change winning-a-prize equipment -- various pachinko machines of composition of a right occurring, if a ball goes into a hole, and generating the special operating state which produces the operation whose opening-and-closing winning-a-prize machine carries out predetermined-time opening of the winning-a-prize mouth specially within the limit of the predetermined number whenever [of CHAKKA] a ball goes into a starting mouth specially are proposed

[0003]

[Problem(s) to be Solved by the Invention] By the way, disagreeable ***** which lacks in ***** of a game on the contrary since profits will be certainly offered if it is in the composition which considers as great success and supplies predetermined profits when it becomes a predetermined hookup drawing handle with pattern combination display, and it is becoming it a great success. Then, if predetermined change winning-a-prize equipment is made to drive and certain winning-a-prize conditions are filled with a great success state, as the right of great success is generated, the thing of composition of having produced complication of a game is proposed. On the other hand, even if it is in the composition which does not use pattern combination display, the change winning-a-prize equipment for generating predetermined gain is proposed variously. this invention aims at having been rich in change in the hit operation in the thing equipped with this kind of change

winning-a-prize equipment.

[0004]

[Means for Solving the Problem] this invention forms an operation opening for the aforementioned change winning-a-prize equipment down the ball passage in a winning-a-prize case. the inside of this operation opening -- usually -- winning a prize -- a hole and specific winning a prize -- a hole being formed, respectively and among two or more balls which flow from a ball entrance further by the open operation of the predetermined time of the piece of an opening-and-closing operation any one ball -- specific winning a prize -- a hole -- leading -- other balls -- usually -- winning a prize, while arranging and constituting the distributor led to a hole specific winning a prize of the aforementioned change winning-a-prize equipment -- a hole is made open for free passage and it has a control-command means to generate an advantageous special operating state as compared with generating of a disadvantageous ball, by the symmetry equipment which distributes the ball fed from this ball entrance to an advantageous ball and a disadvantageous ball, and generating of an advantageous ball

[0005] What is an operating state specially and made [many] the effective limit number of CHAKKA of the aforementioned opening-and-closing winning-a-prize machine which may make a winning-a-prize mouth open wide specially by generating of an advantageous ball as this control-command means as compared with generating of a disadvantageous ball may be proposed.

[0006] Moreover, specially, by the operating state, a ball goes into a starting mouth specially and what lengthened time of aforementioned CHAKKA for an opening-and-closing winning-a-prize machine to carry out an open operation as compared with generating of a disadvantageous ball may be proposed by generating of an advantageous ball.

[0007] Furthermore, if it changes according to a ball inflow to the starting gate, it has two or more pattern displays which indicate the various patterns defined beforehand by change and the aforementioned pattern display serves as a predetermined pattern In the thing using the change winning-a-prize equipment which was made to carry out open control of the aforementioned ball entrance by the piece of an opening-and-closing operation specific winning a prize of the aforementioned change winning-a-prize equipment -- a hole being made open for free passage, and, when the ball which flowed into the symmetry equipment which distributes the ball fed from this ball entrance to an advantageous ball and a disadvantageous ball, and symmetry equipment turns into an advantageous ball It is characterized by providing a control-command means to maintain the hit probability of a pattern display to high probability till a predetermined stage as compared with generating of a disadvantageous ball.

[0008] It is in each means mentioned above, and can have the sound processor which reports generating of the disadvantageous ball and advantageous ball which were able to be distributed with the aforementioned symmetry equipment by different sound effect.

[0009]

[Function] the piece of an opening-and-closing operation changes into open position -- having -- a ball entrance to two or more balls -- flowing -- one of them -- a distributor -- specific winning a prize -- if led to a hole, a special winning-a-prize state will occur And if a ball is distributed, and flows into equipment and this serves as an advantageous ball, as compared with the case where it becomes a disadvantageous ball, a pachinko machine will produce an advantageous operation for a game person.

[0010]

[Example] One example of this invention is explained about an accompanying drawing. Drawing 1 is the front view of the pachinko machine 1, and a ball saucer, the rotating type handle for ball discharge, etc. are prepared in the lower part which the machine frame 2 does not illustrate. As

drawing 2 expands and shows, change winning-a-prize equipment 4 is arranged in the center of the face of a board of the game board 3.

[0011] As change winning-a-prize equipment 4 clearly shown in drawing 2 -4, by making the winning-a-prize case 5 into a base, it is surrounded by the upper half by the peripheral wall 7, the operation window hole 6 is formed in it, and the ball passage 8 which inclines toward the right-hand side in drawing in the lower part of this operation window hole 6 is formed in it.

[0012] On the other hand, the pattern displays 10a, 10b, and 10c which consist of three 7 segment indicators which constitute the combination display 9 are installed in the main front face on the ball passage 8 of the aforementioned operation window hole 6 side by side. The aforementioned pattern displays 10a, 10b, and 10c are constituted by Light Emitting Diode or liquid crystal, and the pattern which can express "0" - "9" etc. with 7 segment indicator which consists of a number and the alphabet is displayed. Moreover, the standby record lamp train 11 which consists of four pilot lamps is formed in the upper-limb section of the operation window hole 6.

[0013] The ball entrance 12 is formed in the left wall of a peripheral wall 7, it is supported by the rotation shaft 13 at the soffit section of this ball entrance 12, the ball entrance 12 is covered in the state of standing up, and the piece 14 of an opening-and-closing operation which opens the ball entrance 12 in the state of lying down is supported pivotably. Rotation control of the pivot 13 is carried out, and this piece 14 of an opening-and-closing operation is changed into open position and a synizesis position by the opening-and-closing driving gear constituted by the solenoid 33 held at the wearing frame 30.

[0014] The almost circular operation opening 16 is formed in the lower part of the aforementioned display window hole 6. This operation opening 16 is open for free passage with the ball passage 8 through the ball input 15 in the position biased about 60 degrees from the center on the right-hand side in drawing so that clearly [drawing 5 -7]. Ball detection equipment 15a is arranged in this ball input 15, and it enables it to detect passage of a ball to it.

[0015] moreover -- the directly under position of the aforementioned operation opening 16 -- usually -- winning a prize -- the front-wall side 19 of the position which the hole 17 was formed and was further biased from the center 60 degrees to left-hand side -- specific winning a prize -- the hole 18 is formed this specific winning a prize -- the hole 18 is open for free passage with the ball path (not shown) equipped with ball detection equipment furthermore, the aforementioned common winning a prize -- a hole 17 and specific winning a prize -- while the ball which flowed down to the hole 18 turns into a winning-a-prize ball and discharging the premium ball of a predetermined number according to a well-known mechanism -- the aforementioned specific winning a prize -- it will be detected by ball detection equipment, it will be in an operating state specially, and the right which receives necessary gain in a play person is made generated when a ball flows down to a hole 18

[0016] The disk-like rotation distributor 20 has the center supported in this operation opening 16 by the pivot 21 which penetrates the front-wall side 19, and is arranged. By ****(ing) the thick section in the tooth-back wall 22, the aforementioned rotation distributor 20 forms the main entrance 23, the guidance mouth 26, and the subentrance 24 in the peripheral surface by angle arrangement of about 120 ** at a peripheral surface, respectively, and is opening the main entrance 23 and the subentrance 24 for free passage in the configuration stay slot 25 which goes away check-by-looking possible. Furthermore, the guidance mouth 26 is enabling the receipt for a ball piece. Moreover, as for the back of the guidance mouth 26, the tooth-back wall 22 is removed. The stay slot 25 and the guidance mouth 26 are opened wide ahead further again. And a game person can check the movement of the stay slot 25 where the check by looking of the rotation distributor 20 is attained by bore section 5b of front-face board of wrap 5a, and it mentions the operation opening 16 of the

aforementioned winning-a-prize case 5 later for this reason, and the ball which flows into the guidance mouth 26.

[0017] The driving shaft of the drive control motor 31 which consists of a step motor supported by the wearing frame 30 behind the winning-a-prize case 5 is coordinated through the gear train 32, and it enables it to carry out the roll control of the aforementioned rotation distributor 20 to the aforementioned pivot 21 to a counterclockwise rotation. Moreover, the aforementioned piece 14 of an opening-and-closing operation is changed into open position and a synizesis position by drive control by the solenoid 33 similarly held at the wearing frame 30. In addition, the winning-a-prize mouth 35 is arranged in the upper part of change winning-a-prize equipment 4.

[0018] Moreover, the starting gate 40 equipped with the sphere detection equipment (not shown) constituted by a photoelectric switch, the limit switch, etc. under the aforementioned change winning-a-prize equipment 4 is formed. If a game sphere passes to this starting gate 40 and the sphere detection signal by this sphere detection equipment occurs, while driving the combination display 9, the premium sphere of a predetermined number is generated with passage of the game sphere like the usual winning-a-prize mouth.

[0019] the prehension which enables the hold for a ball piece at body of revolution 46 as drawing 8 shows to the method of the right of change winning-a-prize equipment 4 -- rotation CHAKKA 45 in which a hole 47 contains the body of revolution 46 formed in the periphery is arranged in this rotation CHAKKA 45, the starting mouth 48 arranges specially -- having -- the aforementioned prehension -- rotation of body of revolution 46 is specially supplied with the ball included in the hole 46 at the starting mouth 48

[0020] Further, below, as drawing 9 shows, the opening-and-closing winning-a-prize machine 50 equipped with the special winning-a-prize mouth 52 by which the opening-and-closing board 53 is operated by the solenoid 51, and opening-and-closing drive control is carried out is arranged.

[0021] and specific winning a prize -- the time of the special operating state produced when a ball flows down to a hole 19 -- prehension of rotation CHAKKA 45 -- if a ball flows into a hole 47 and a ball is specially supplied to the starting mouth 48 with rotation of rotation CHAKKA 45, the opening-and-closing board 53 of the winning-a-prize mouth 52 will open for about 10 seconds specially In addition, when about ten balls flow into this special winning-a-prize mouth 52, even if it is [open] under operation, the open operation is completed. Moreover, whenever a game sphere wins a prize of rotation CHAKKA 45 in the range (usually 16 pieces) of the effective limit number, the winning-a-prize mouth 52 is opened wide specially, and it **, and an operating state is completed specially behind.

[0022] The symmetry equipment 60 of the aforementioned starting gate 40 shown in a lower part position in detail drawing 10 -13 is arranged further.

[0023] It explains per composition of this symmetry equipment 60. Symmetry equipment 60 is equipped with the socket 61 by which opening of the upper surface was carried out to the upper part. This socket 61 is equipped with guidance **** 62, and the bore 63 is formed in the center. And the bottom plate equipped with guidance **** 64 as well as the shape of the said heart is prepared in the lower part of aforementioned guidance **** 62. The discharge way 66 which shows a ball to the tangential direction of this guidance **** 64 is formed in the posterior section of aforementioned guidance **** 64, and the aforementioned bore 63 is open for free passage by the discharge way 66 and the upper and lower sides with **** 65 formed in the inferior surface of tongue of guidance **** 62. moreover, center-section first transition is advantageous for aforementioned guidance **** 64 -- a hole 67 and back right and left are disadvantageous -- holes 68 and 68 are formed and still more advantageous -- a hole 67 is disadvantageous for advantageous ** 69 which the ball detection switch S1 (refer to drawing 16) possessed -- holes 68 and 68 are

open for free passage to disadvantageous ** 70 and 70 which the ball detection switch S2 (refer to drawing 16) possessed

[0024] The exhaust port 71 is arranged on the aforementioned symmetry equipment 60. this exhaust port 71 -- the aforementioned specific winning a prize -- a hole 18, the circulation way 72, and a thing open for free passage -- it is -- therefore, specific winning a prize -- the ball included in the hole 18 will be distributed and will flow out on equipment 60

[0025] It is in this composition, and the first transition section of the aforementioned socket 61 projects from the game board 3, and this serves as the substantial socket 61. **** 73 struck between change winning-a-prize equipment 4 separates this socket 61 from the circumference in the face of a board -- having -- fall of the aforementioned change winning-a-prize equipment 4 -- it is open for free passage only with the hole 25 And the ball included in the socket 61 falls on this discharge way 66 through **** 65 from the bore 63 of guidance **** 62. and by guidance operation of the discharge way 66, a ball flows and revolves around the sun from a tangential direction to guidance **** 64, and advantageous -- a hole 67 -- disadvantageous -- it flows into either of the holes 68 and 68 and advantageous -- the ball detection switch S1 is disadvantageous for a hole 67 -- the ball detection switch S2 is advantageous to holes 68 and 68 by ball distinction are arranged, respectively (refer to drawing 14) and according to these switches S1 and S2 -- the ball included in the hole 67 turns into an advantageous ball, and is disadvantageous -- the ball included in holes 68 and 68 turns into a disadvantageous ball

[0026] Next, it explains per operation of change winning-a-prize equipment 4. If a game sphere is hammered out by the game board 3 and it passes through the starting gate 40, either will be elected among the tables of random numbers stored in the storage ROM connected to the central control unit CPU shown by drawing 10 , and it will hit corresponding to the election value, or a blank will be determined. and -- if the aforementioned combination display 9 is driven through a pattern display drive circuit with supply of a premium sphere, the change start of the pattern displays 10a, 10b, and 10c is carried out and about about 5 seconds pass -- hitting -- the judgment of a blank -- a basis -- from **** and a table of random numbers, the pattern of the pattern displays 10a, 10b, and 10c is determined, and it stops one by one And the same pattern or the pattern displays 10a and 10b are "becoming it a great success", when pattern display 10c is "this" pattern in the same pattern, a solenoid 33 drives, the piece 14 of an opening-and-closing operation will be in an inclination state (open state), and the pattern of the pattern displays 10a, 10b, and 10c will shift to the operation which makes the following predetermined gains possible, while a loudspeaker emits singing with the speech processing unit shown by drawing 14 .

[0027] In addition, when a game sphere flows into the aforementioned starting gate 40 continuously, the standby record lamp train 11 lights up one by one, and is suspended a maximum of 4 times.

[0028] That is, this piece 14 of an opening-and-closing operation is about 5.9. Second opening is carried out and a hitted ball flows partly from opening 12 during this opening. On the other hand, in the state of synizesis of the piece 14 of an opening-and-closing operation, although the rotation distributor 20 is carrying out low-speed rotation counterclockwise, high-speed rotation of it is carried out with great success, and the guidance mouth 26 suspends it in the state where it was mostly located in direct down, in accordance with the ball input 15 which the main entrance 23 formed in the right end of the ball passage 8 as drawing 3 and drawing 5 showed. For this reason, as for the ball containing opening 12, a ball flows into the main entrance 23 from the ball input 15. At this time, the main entrance 23 and the subentrance 24 open for free passage through the stay slot 25 Since it is in the left position biased about 60 degrees from the center, and it has become stay slot 25 foil character-like and the inertial flow appearance is prevented by the small salient 27, Two balls x1 and x2 Stay becomes possible in the stay slot 25, and the remainder will remain in the ball

input 15 and on the ball passage 8.

[0029] On the other hand, it is the third ball x3 by ball detection equipment 15a arranged in the aforementioned ball input 15. Detection rotates the aforementioned rotation distributor 20 to a counterclockwise rotation. And as drawing 6 shows, when the guidance mouth 26 is in agreement with the ball input 15, it is a ball x3. It flows into the guidance mouth 26. this time -- the subentrance 24 -- usually -- winning a prize -- a hole 17 -- in agreement -- this sake -- two balls x1 in the stay slot 25, and x2 this common winning a prize -- it is discharged to a hole 17 side and further, the rotation distributor 20 rotates and drawing 4 and drawing 7 show it -- as -- the guidance mouth 26 -- specific winning a prize -- if in agreement with a hole 18 -- the ball -- specific winning a prize -- it is discharged to a hole 18 moreover -- this position -- the subentrance 24 -- the ball input 15 -- in agreement -- and the main entrance 23 -- usually -- winning a prize -- since it is in agreement with a hole 17 -- four or more ball x4 - continuous -- the inside of the stay slot 25 -- going -- usually -- winning a prize -- it will be fallen and discharged to a hole 17 side

[0030] This the operation of each is controlled by the drive control means which consist of central control units CPU.

[0031] and the aforementioned specific winning a prize -- a hole 18 -- ball x3 If it flows down, it will be detected by the ball detection equipment arranged in the circulation way, it will be in an operating state specially, and the right of great success will occur. That is, it does not become effective, unless three or more balls flow from opening 12, even if the combination display 9 serves as combination used as predetermined great success. It will ** and the winning-a-prize conditions for generating great success will be added.

[0032] specific winning a prize -- the ball included in the hole 18 is distributed from an exhaust port 71 via the circulation way 72, and flows down on the socket 61 of equipment 60 and pass the process mentioned above -- advantageous -- a hole 67 -- disadvantageous -- it flows into either of the holes 68 and 68, and can distribute to an advantageous ball and a disadvantageous ball in addition, advantageous -- a hole 67 -- disadvantageous -- although there is a difference in the content of the profits so that it may mention later even if it goes into any of holes 68 and 68, all will be in an operating state specially and can receive predetermined profits namely, specific winning a prize -- when a ball goes into a hole 18, it will be in an operating state specially

[0033] here, advantageous -- having gone into the hole 67 -- or disadvantageous -- the sound processor controlled by the central control unit CPU so that it may report clearly and it is shown in drawing 14 whether it went into holes 68 and 68 -- each -- a hole 67, the ball detection switch S1 within 68, and S2 It is made to generate a sound effect which is different based on the ball detection to depend, respectively from a loudspeaker. Thereby, a game person can make a state judgment easily.

[0034] a ball is disadvantageous as mentioned above -- as advantageous as the case where it goes into holes 68 and 68 -- the contents of an operating state differ specially by the case where it goes into a hole 67 This difference may be performed by changing the limit number (henceforth the effective limit number) containing the ball to the special starting mouth 48 which may make the winning-a-prize mouth 52 open wide specially.

[0035] advantageous in the effective limit number, if it explains in detail -- it considers as 16 pieces and disadvantageous, when it goes into a hole 67 and is able to distribute to an effective ball -- you may be two pieces, when it goes into holes 68 and 68 and is able to distribute to an invalid ball and disadvantageous -- holes 68 and 68 -- or advantageous -- the case where it goes into a hole 67 -- between this special operating state -- prehension of rotation CHAKKA 45 -- if a ball flows into a hole 47 and a ball is specially supplied to the starting mouth 48 with rotation of the rotation distributor 46, the opening-and-closing board 53 of the winning-a-prize mouth 52 will open for

about 10 seconds specially And when about ten balls flow into this special winning-a-prize mouth 52, even if it is [open] under operation, the open operation is completed. And an operating state is specially completed with digestion of the effective limit number.

[0036] **(ing), a game person will receive the supply of the gain accompanying great success advantageously by generating of an advantageous ball as compared with generating of a disadvantageous ball.

[0037] As a means to generate the difference in these profits, a means to make the released time of the aforementioned opening-and-closing board 53 produce a difference may also be adopted. That is, in the case of the special operating state based on [in the case of the special operating state based on an effective ball, make the released time of the aforementioned opening-and-closing board 53 into about 10 seconds, and] generating of an invalid ball, it is 5. It considers as a second grade.

[0038] Next, the hit probability of the pattern displays 10a, 10b, and 10c controlled by the aforementioned combination display 9 is specially changed after an operation end, and a means to make profits produce a difference may also be applied.

[0039] that is, advantageous -- when it goes into a hole 67 and an effective ball arises, it is made to raise the hit probability of the next pattern displays 10a, 10b, and 10c which the operation ended specially 10 times rather than usual on the other hand, disadvantageous -- if it is when it goes into holes 68 and 68 and an invalid ball is generated, after an operation end is specially made into the usual hit probability on the other hand, disadvantageous with symmetry equipment -- if it goes into a hole 68 -- the second -- it will be in a winning-a-prize state specially

[0040] This composition is explained in more detail. the storage ROM connected to the central control unit CPU -- 276 to "0" - "275" The random number value which circulates through a coma is stored, and the either is elected with the sphere passage to the above 40. Only the case where this value is "0" is considered as a hit, and except [it] is judged to be HAZURE. and immediately after sphere passing to the starting gate 40 when passage storage is carried out It will combine, if the number of storage is digested, change of display 9 is started, the pattern of a hit or a blank is selected based on the aforementioned judgment result, a drive halt of the combination display 9 is carried out, and it displays on the pattern displays 10a, 10b, and 10c.

[0041] therefore -- usually -- hit probability -- 1/276 it is . however, the above -- advantageous -- hit probability is made into 10 times by considering even "0" - "9" as a hit among random number values until a next hit will occur, if a ball goes into a hole 67, the ball detection switch S2 carries out an ON operation, the effective limit number will go into the starting mouth 48 specially and an operating state will be specially completed, as mentioned above in this case, advantageous, if it is in a next hit operation -- an advantageous operation is not produced even if a ball goes into a hole 67 in addition, it is good also as high probability and continuously, disadvantageous [during great success] in this case -- as for hit probability, a high state will be maintained unless a ball goes into holes 68 and 68

[0042] furthermore, disadvantageous -- when it goes into holes 68 and 68, as compared with the usual state, it is good also as high probability for example, advantageous -- based on the ball inflow of a hole 67, probability is raised by 10 times rather than usual, and disadvantageous -- it is made to raise probability by 5 times rather than usual based on the ball inflow of holes 68 and 68 Also in this case, profits may be made to produce a big difference with an effective ball and an invalid ball. In addition, in this case, it will usually return to probability by next great success.

[0043] A series of above-mentioned operations may be easily performed by the control-command means which consists of a central control unit CPU shown by drawing 14 . This central control unit CPU serves also as the drive control means of change winning-a-prize equipment 4, as mentioned above.

[0044]

[Effect of the Invention] As this invention was mentioned above, the change winning-a-prize equipment 4 which receives a ball is equipped with a distributor 20 by the opening-and-closing operation of the piece 14 of an opening-and-closing operation. The inside of two or more balls which flow from the ball entrance 12 with this distributor 20 by the open operation of the predetermined time of the piece 14 of an opening-and-closing operation, It distributes. any one ball -- specific winning a prize -- a hole 18 -- leading -- other balls -- usually -- winning a prize -- a hole 17 -- leading -- further -- this specific winning a prize -- the ball included in the hole 18 was prepared on the play board 3 -- with equipment 60 When it distributes to an advantageous ball and a disadvantageous ball and is able to distribute to an advantageous ball Since it is made to produce a profits **** operation for a game person as compared with the time of becoming a disadvantageous ball There is an outstanding effect which will hold a thrilling hope, and should be rich in change in the operation of the play face of a board, and can raise the interest of a pachinko game to the whereabouts of the ball in symmetry equipment 60 further.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the front view of the pachinko machine 1 of this invention.

[Drawing 2] It is the front view of change winning-a-prize equipment 4.

[Drawing 3] It is the perspective diagram of change winning-a-prize equipment 4.

[Drawing 4] It is the perspective diagram showing other modes which omitted some change winning-a-prize equipments 4.

[Drawing 5] It is the transection front view showing the operation of the rotation distributor 20.

[Drawing 6] It is the transection front view showing other operations of the rotation distributor 20.

[Drawing 7] It is the transection front view showing the operation of further others of the rotation distributor 20.

[Drawing 8] It is the perspective diagram of rotation CHAKKA 45.

[Drawing 9] It is the perspective diagram of the large winning-a-prize mouth 47.

[Drawing 10] It is the vertical section front view showing symmetry equipment 60.

[Drawing 11] It is the drawing 10 A-A cross section.

[Drawing 12] It is the plan which symmetry equipment 60 shows.

[Drawing 13] It is the drawing 10 B-B cross section.

[Drawing 14] It is the block diagram showing a control-command means.

[Description of Notations]

1 Pachinko Machine
4 Change Winning-a-Prize Equipment
5 Winning-a-Prize Case
6 Operation Window Hole
9 Combination Display
10a, 10b, 10c Pattern display
12 Ball Entrance
14 Piece of Opening-and-Closing Operation
17 Usually -- Winning a Prize -- Hole
18 Specific Winning a Prize -- Hole
20 Rotation Distributor
21 Pivot
40 Starting Gate
45 Rotation CHAKKA
46 Rotation Distributor
48 It is Starting Mouth Specially.
50 Opening-and-Closing Winning-a-Prize Machine
52 It is Winning-a-Prize Mouth Specially.
60 Symmetry Equipment
67 and 67 disadvantageous -- hole
68 Advantageous -- Hole

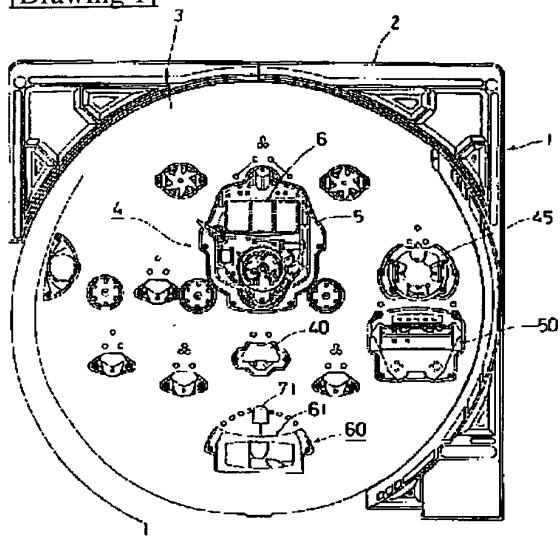
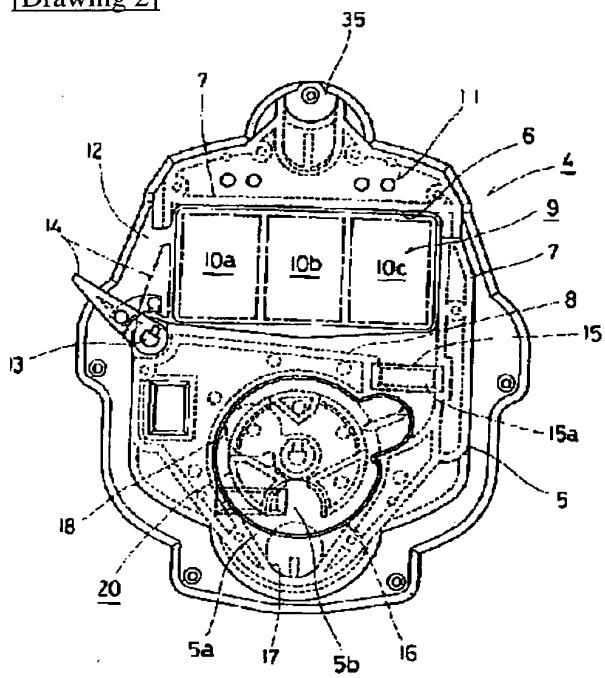
[Translation done.]

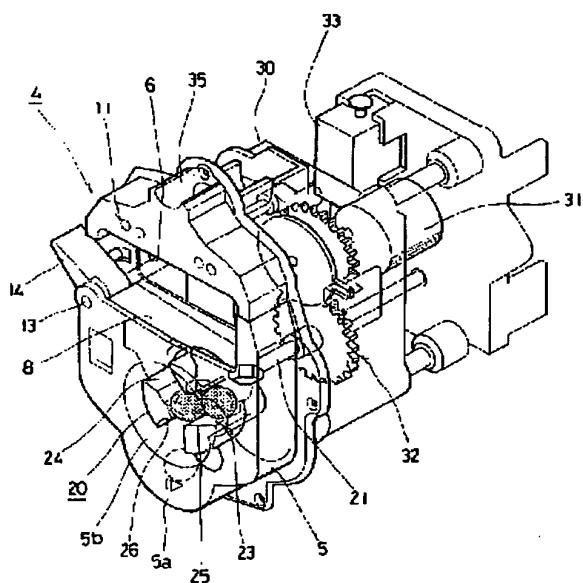
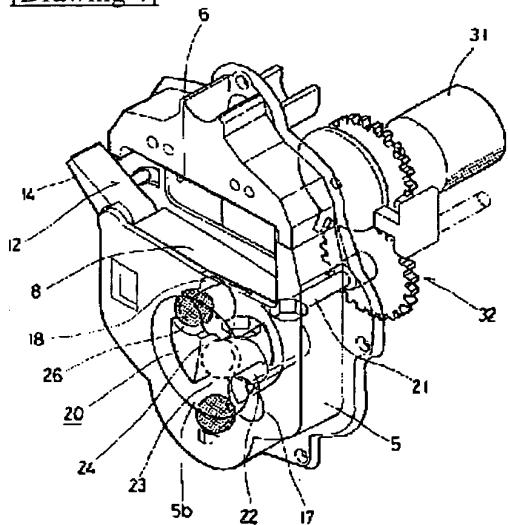
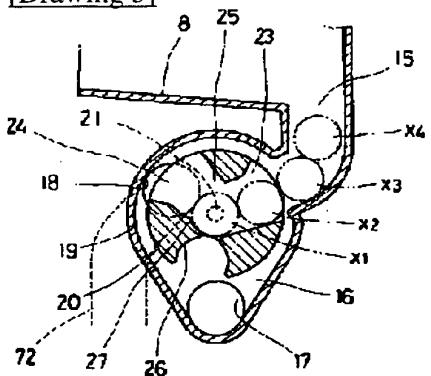
*** NOTICES ***

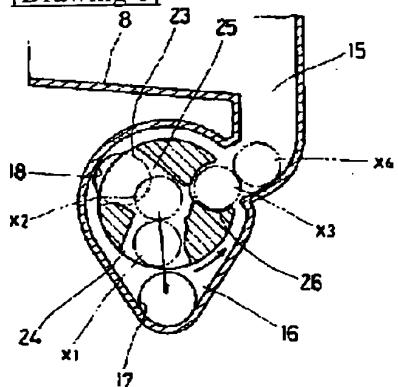
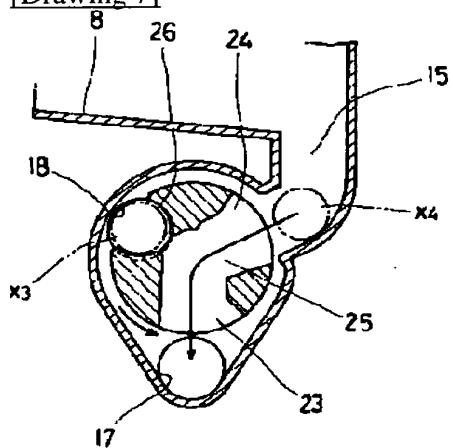
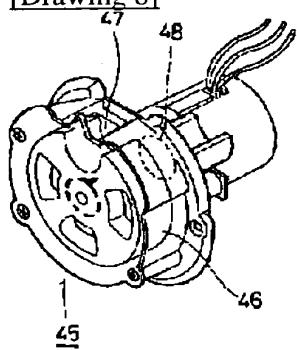
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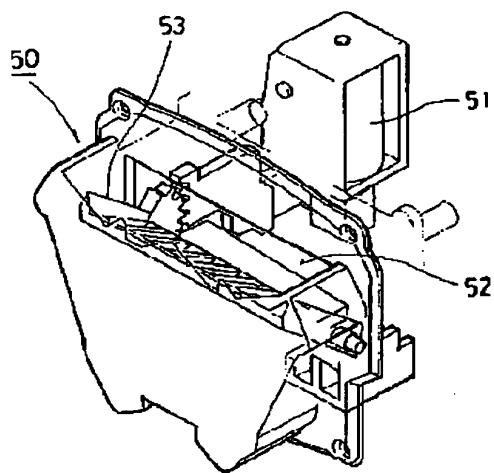
1. This document has been translated by computer. So the translation may not reflect the original precisely.
 2. **** shows the word which can not be translated.
 3. In the drawings, any words are not translated.
-

DRAWINGS

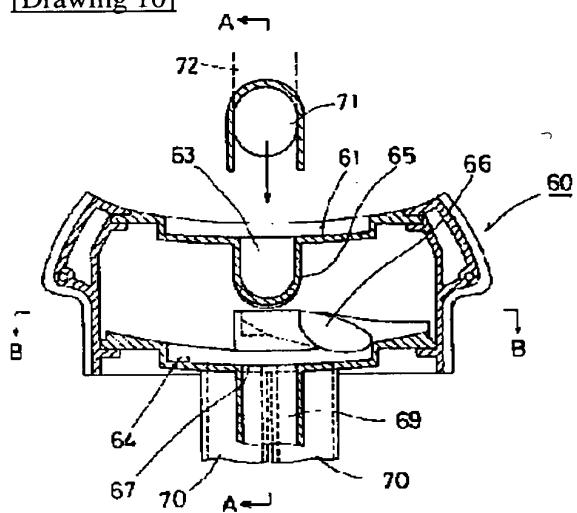
[Drawing 1][Drawing 2][Drawing 3]

[Drawing 4][Drawing 5]

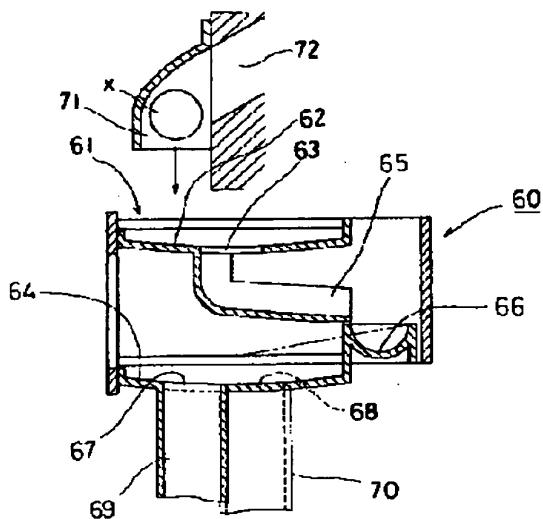
[Drawing 6][Drawing 7][Drawing 8][Drawing 9]



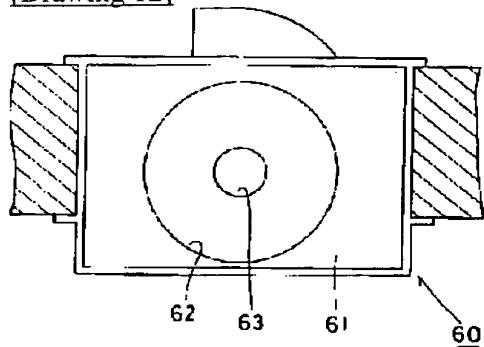
[Drawing 10]



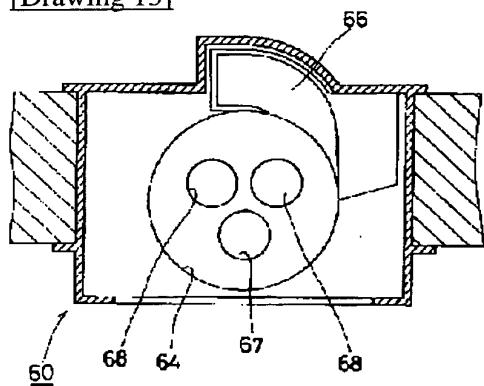
[Drawing 11]



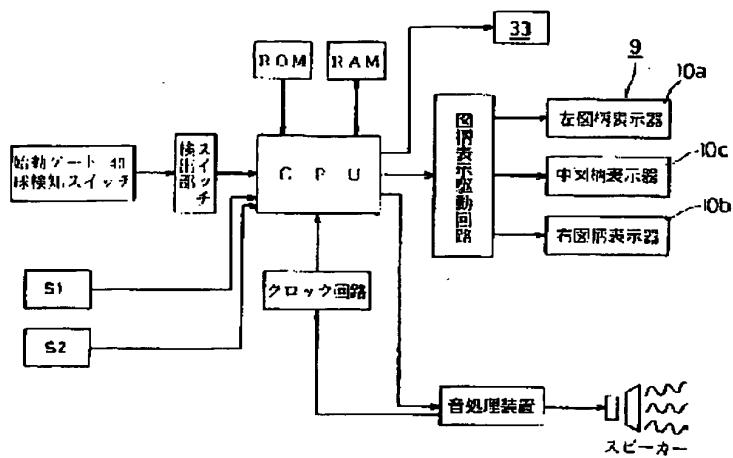
[Drawing 12]



[Drawing 13]



[Drawing 14]



[Translation done.]